In re Appln. of Loveland
Application No. 09/502,515

REMARKS

Summary Of The Office Action

Claims 1-21, originally pending in the application, have been rejected.

The Applicant is reminded of new guidelines for Abstract content and length, and the Abstract has been objected to.

Claim 2 is rejected under 35 U.S.C. § 112, second paragraph, as indefinite due to the use of the term "proper response."

Claims 1-21 are rejected under 35 U.S.C. § 102(e) as being anticipated by Kenevsky U.S. Patent No. 6,161,090.

Applicant's Response

In response to the objections to the content and length or the Abstract in items 1-3, Applicant has amended the Abstract to focus upon the dual-access and voice-based logon aspects of the disclosure. It is noted however, that the originally submitted Abstract, notwithstanding its length, more completely addressed the breadth of Applicant's disclosure.

In response to the rejection of claim 2 in items 4-6, Applicant has amended claim 2 by removing the objectionable phrase "proper response." Claim 15 is similarly amended.

With regard to the rejection of claims 1-21, in items 7-8, Applicant has cancelled claims 10 and 16, and incorporated their subject-matter into each of the independent claims (1, 14 and 21). As such, each of the independent claims now includes the element of a "dual-access communications interface supporting both data calls and voice calls over a same physical input."

Turning to item 8 of the Office Action, Applicant traverses the rejection of each of the pending claims 1-21 as anticipated by the Kanevsky '090 patent. The Kenevsky '090 patent discloses speaker verification/authentication data structures and algorithms for carrying out such verification/authentication. However, the Kanevsky '090 does not disclose or suggest that the receiving steps (recited in claims 1 and 21) are carried out through a "dual-access communications interface supporting both data calls and voice calls over a same physical input." The dual-access interface architecture is disclosed, by way of example, in FIG. 3 (described at page 14). The dual-access architecture enables a single physical input to support voice and data calls. In contrast, Kanevsky discloses a voice-only interface of the type used for voice response-based services (e.g., automated phone-based voice-response services). Nowhere does Kanevsky

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suggest accessing the voice verification functionality via the claimed dual-access physical input. Applicant further notes with regard to each of the independent claims (1, 14 and 21) that Kanevsky does not appear to even disclose that its voice verification server/service is used to access a network. In the event that the rejection of claims 1, 14 and 21 is not withdrawn, Applicant requests particular identification of both the recited dual-access interface and computer network elements recited within claims 1, 14 and 21.

Applicant further notes that independent system claim 14 is not rendered unpatentable over the Kanevsky '090 patent. In addition to reciting the dual-access physical input and the computer network elements discussed herein above with reference to claims 1 and 21, claim 14 further recites a logon server element that assigns credentials to an application proxy based upon a successful logon attempt via the recited dual-access interface. Nowhere is such proxy disclosed or suggested by the Kanevsky '090 reference. In the event the rejection of claim 14 is not withdrawn, Applicant requests identification of such teaching in the Kanevsky reference.

Applicant traverses the rejection of claim 2 for at least the reasons set forth for distinguishing claim 1 from the prior art.

Applicant traverses the rejection of claim 3 for the further reason that Kanevsky does not disclose logging a user onto a network, and as such does not disclose the recited "network security server" that receives the verified identity and a password from the network access server after the voice-user has been verified/authenticated by the voice print application associated with the network access server. Nowhere does Kanevsky disclose performing the voice verification and then passing a password and identity to the recited network security server (e.g., the domain controller of FIG. 7). Similarly, Kanevsky does not disclose the logged on user credentials recited in claim 4. Instead, the disclosure of Kanevsky merely recites an authentication step (similar to the elements recited in claim 1), but does not disclose the further step of establishing a "user" within a network based upon the authentication of a voice-user.

Applicant further traverses the rejection of claim 5 that recites creating an application proxy that is assigned the credentials (recited in claim 4) assigned to an authenticated user. Kanevsky, at the cited col. 8, lines 37-55, merely discloses an alternative enrollment procedure for a user having a voice that has not been characterized. Applicant, in support of the elements recited in claim 5, respectfully directs attention to the description of the creation and functionality of the "application proxy" at page 31 and FIG. 8 of Applicant's disclosure. In the

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event that this rejection is not withdrawn, Applicant requests further explanation regarding the applicability of Kanevsky's disclosure at col. 8, lines 37-55 to the recited application proxy in claim 5.

Applicant traverses the rejection of claims 6-9 for at least the above-provided reasons for claims 3 and 1 from which these claims depend. Applicant is unable to identify where col. 8, lines 37-55 of Kanevsky discloses the recited steps of claim 6. Clarification of the grounds for rejecting claim 6 in view of Kanevsky is requested. Furthermore, Applicant respectfully requests identification of the particular teaching of the following recited "applications":

- Personal interactive voice response application (claim 7)
- Distributed conference bridge (claim 8)
- Instant message (claim 9).

Nowhere does Kanevsky disclose these particular recited applications.

With regard to the rejection of claim 10-13, Applicant has incorporated the subject-matter of claim 10 into claim 1 and has pointed out the distinctions between the recited invention and the disclosure of Kanevsky. In particular, Kanevsky does not disclose the recited claim element of a dual-access physical input. Claims 11 and 12 are distinguishable for at least the reasons recited for claim 1 from which they depend.

Applicant traverses the rejection of claim 13. To the extent understood by Applicant, Kanevsky teaches storing *text* responses as well as non-text acoustic modeling data for authenticating a user. Kanevsky does not teach recording a vocal response. Applicant respectfully requests identification of the particular teaching of the recited element of a "vocal response" recorded in a database in the event that this rejection is not withdrawn.

Applicant traverses the rejection of claim 14-20 for at least the reasons set forth above with regard to independent claim 14 (now amended to include the subject-matter of claim 16). With regard to claim 17, Applicant traverses the rejection for at least the reason that Kanevsky does not disclose the recited voice applications server (see, e.g., voice applications server 186 of FIG. 3 and described at pages 14-15 of the application). Nor does Kanevsky specifically recite the particular applications recited in claims 18 and 19 that now depend from claim 17. Nor does Kanevsky disclose or suggest the electronic personal assistant platform recited in claim 20 that is described, by way of example, in the application with reference to FIG. 4. In the event that the

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rejection is not withdrawn, Applicant requests identification of these specifically recited applications/platform in the Kanevsky reference.

In view of the foregoing amendments and remarks, Applicant submits that the present application is in condition for allowance. An early and favorable action is earnestly requested.

Respectfully submitted,
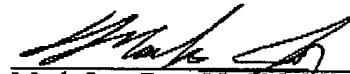
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PATENT
Attorney Docket No. 203665

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Loveland

Application No. 09/502,515

Filed: February 11, 2000

Art Unit: 2654

Examiner: Chawan, Vijay B.

For: Voice Print Access to Computer Resources

AMENDMENTS TO CLAIMS AND ABSTRACT
MADE IN RESPONSE TO OFFICE ACTION DATED SEPTEMBER 30, 2002

Amendments to existing claims:

Please cancel claims 10 and 16, and amend claims 1, 2, 6, 11, 12, 14, 15, 18, 19 and 21, as follows:

1.   (Amended) A method for authenticating a user for access to a computer network via a network access server including a ~~voice interface and a speech synthesizer~~ dual-access communications interface supporting both data calls and voice calls over a same physical input, the method comprising the steps of:

receiving, via the dual-access communications interface, a user identification from a user seeking access to the computer network via the ~~voice~~dual-access communications interface;

issuing a variable challenge query;

receiving, via the dual-access communications interface, a voice response to the challenge query; and

selectively logging the user onto the computer network based upon a determination of whether the voice response to the challenge meets a matching standard with reference to a stored voice sample sequence, wherein the voice sample sequence corresponds to the user identification and the challenge query.

2.   (Amended) The method of claim 1 wherein the variable challenge query is selected from a set of potential queries, the variable challenge query determined in a manner

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such that the user cannot ~~predict~~determine, in advance of the issuing step, ~~a proper response~~ ~~to~~ the challenge query.

6.   (Amended) The method of claim 3 further comprising the steps of receiving a notification of successful logging onto the computer network and thereafter executing an application in accordance with vocal commands received by the ~~voice interface~~dual-access communications interface.

11.   (Amended) The method of claim 1 wherein the challenge query is a request to repeat a phrase transmitted by the ~~voice~~dual-access communications interface.

12.   (Amended) The method of claim 11 wherein the phrase transmitted by the ~~voice~~dual-access communications interface is generated by a text to speech synthesizer based upon alphanumeric values.

14.   (Amended) A system for authenticating a user for access to a computer network ~~via a voice interface~~, the system comprising:

        a user authentication database including for each registered user:
                an identification, and
                a set of vocal samples corresponding to the identification;
        a network access server, including a dual-access communications interface supporting both data calls and voice calls over a same physical input, for receiving a user identification from a user seeking authentication via the ~~voice~~dual-access communications interface, issuing a variable challenge query, comparing a received response to the challenge query to a stored voice sample sequence corresponding to the user identification and the challenge query, and issuing a logon request, including a user identification and password, on behalf of an authenticated user determined by the comparison of the received response to the stored voice sample sequence;
        a logon server coupled to the networked access server and configured to receive the user identification and password from the network access server and in response providing a set of corresponding credentials for use by an application proxy.

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15.   (Amended) The system of claim 14 wherein the variable challenge query is obtained from a set of potential queries wherein the variable challenge query is determined in a manner such that a user cannot ~~predict~~determine, in advance of issuing the challenge query, ~~a proper response to~~ the challenge query.

18.   (Amended) The system of claim ~~14~~ 17 wherein the voice applications include a personal interactive voice response application.

19.   (Amended) The system of claim ~~14~~ 17 wherein the voice applications include a distributed conference bridge.

21.   (Amended) A computer-readable media including computer-executable instructions for performing a set of steps for authenticating a user for access to a computer network via a network access server including a ~~voice interface and a speech synthesizer~~ dual-access communications interface supporting both data calls and voice calls over a same physical input, the steps including:

       receiving, via the dual-access communications interface, a user identification from a user seeking access to the computer network via the ~~voice~~dual-access communications interface;

       issuing a variable challenge query;

       receiving, via the dual-access communications interface, a voice response to the challenge query; and

       selectively logging the user onto the computer network based upon a determination of whether the voice response to the challenge meets a matching standard with reference to a stored voice sample sequence, wherein the voice sample sequence corresponds to the user identification and the challenge query.

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Amendments to the abstract:

The entire contents of page 40, including the heading "Abstract of the Invention", of the
originally submitted application were deleted and replaced by the following:

ABSTRACT

A dual-access communications server system is disclosed for enabling
communication between server resources and a wide spectrum of end-terminals to enable
users access to the resources of both converged and non-converged networks via voice and/or
electronically generated commands. Server resources are provided through a converged
computer/telephony system interface such that the data and resources are readily accessed by
either voice or data calls. A set of applications provide dual interfaces for rendering services
and data based upon the manner in which a user accesses the data. A user is authenticated by
receiving vocal responses by a user to one or more requests variably selected and issued by a
speaker recognition-based authentication facility. Thereafter, an application proxy is created.
The application proxy acts on behalf of the authenticated authorized user in accessing
applications via the dual-access communications interface.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Loveland

Application No. 09/502,515

Filed: February 11, 2000

For: Voice Print Access to Computer Resources

Art Unit: 2654

Examiner: Chawan, Vijay B.

PENDING CLAIMS AFTER AMENDMENTS
MADE IN RESPONSE TO OFFICE ACTION DATED SEPTEMBER 30, 2002

1.   (Amended) A method for authenticating a user for access to a computer network via a network access server including a dual-access communications interface supporting both data calls and voice calls over a same physical input, the method comprising the steps of:

receiving, via the dual-access communications interface, a user identification from a user seeking access to the computer network via the dual-access communications interface;

issuing a variable challenge query;

receiving, via the dual-access communications interface, a voice response to the challenge query; and

selectively logging the user onto the computer network based upon a determination of whether the voice response to the challenge meets a matching standard with reference to a stored voice sample sequence, wherein the voice sample sequence corresponds to the user identification and the challenge query.

2.   (Amended) The method of claim 1 wherein the variable challenge query is selected from a set of potential queries, the variable challenge query determined in a manner such that the user cannot determine, in advance of the issuing step, the challenge query.

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3.   The method of claim 1 wherein the logging on procedure comprises
submitting a stored computer network user identification and password by the network access
server to a network security server.

4.   The method of claim 3 further comprising the step of receiving, in response to
the submitting step, a set of credentials for a logged on user.

5.   The method of claim 4 further comprising the step of creating an application
proxy having the set of credentials for the logged on user, the application proxy carrying out
requests on behalf of the user seeking access to the computer network.

6.   (Amended) The method of claim 3 further comprising the steps of receiving a
notification of successful logging onto the computer network and thereafter executing an
application in accordance with vocal commands received by the dual-access communications
interface.

7.   The method of claim 6 wherein the application comprises a personal
interactive voice response application.

8.   The method of claim 6 wherein the application comprises a distributed
conference bridge.

9.   The method of claim 6 wherein the application comprises an instant
messaging application.

10.   (Cancelled)

11.   (Amended) The method of claim 1 wherein the challenge query is a request to
repeat a phrase transmitted by the dual-access communications interface.

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12.   (Amended) The method of claim 11 wherein the phrase transmitted by the dual-access communications interface is generated by a text to speech synthesizer based upon alphanumeric values.

13.   The method of claim 1 wherein the challenge query is a question for which a corresponding vocal response has been recorded in an authentication database entry keyed to an identified user and the question.

14.   (Amended) A system for authenticating a user for access to a computer network, the system comprising:

      a user authentication database including for each registered user:

            an identification, and

            a set of vocal samples corresponding to the identification;

      a network access server, including a dual-access communications interface supporting both data calls and voice calls over a same physical input, for receiving a user identification from a user seeking authentication via the dual-access communications interface, issuing a variable challenge query, comparing a received response to the challenge query to a stored voice sample sequence corresponding to the user identification and the challenge query, and issuing a logon request, including a user identification and password, on behalf of an authenticated user determined by the comparison of the received response to the stored voice sample sequence;

      a logon server coupled to the network access server and configured to receive the user identification and password from the network access server and in response providing a set of corresponding credentials for use by an application proxy.

15.   (Amended) The system of claim 14 wherein the variable challenge query is obtained from a set of potential queries wherein the variable challenge query is determined in a manner such that a user cannot determine, in advance of issuing the challenge query, the challenge query.

16.   (Cancelled)

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17.   The system of claim 14 further comprising a voice applications server supporting a set of voice applications.

18.   (Amended) The system of claim 17 wherein the voice applications include a personal interactive voice response application.

19.   (Amended) The system of claim 17 wherein the voice applications include a distributed conference bridge.

20.   The system of claim 14 further comprising an electronic personal assistant platform supporting an extensible set of voice accessed applications.

21.   (Amended) A computer-readable media including computer-executable instructions for performing a set of steps for authenticating a user for access to a computer network via a network access server including a dual-access communications interface supporting both data calls and voice calls over a same physical input, the steps including:

receiving, via the dual-access communications interface, a user identification from a user seeking access to the computer network via the dual-access communications interface;

issuing a variable challenge query;

receiving, via the dual-access communications interface, a voice response to the challenge query; and

selectively logging the user onto the computer network based upon a determination of whether the voice response to the challenge meets a matching standard with reference to a stored voice sample sequence, wherein the voice sample sequence corresponds to the user identification and the challenge query.

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